

# 3020P

*electro-mechanical  
24 hour timeswitch with  
auxiliary heating switch*

## Installation & User Instructions



This product complies with the following EC Directives:  
**Electro-Magnetic Compatibility Directive.**  
(EMC) (89\336\EEC), (92\31\EEC)  
**Low Voltage Directive.**  
(LVD) (73\23\EEC), (93\68\EEC)



**Danfoss**

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# Installation Instructions

## Please Note:

***This product should only be installed by a qualified electrician or competent heating installer, and should be in accordance with the current edition of the IEEE wiring regulations.***

## Product specification

Specification	
Power supply	230 ± 15% Vac, 50/60Hz
Switch action	1 x SPST, type 1B
Switch rating	Max 264 Vac, 50/60Hz, 3(1) A
Timing accuracy	± 1 min/month
Enclosure rating	IP30
Max. ambient temperature	55°C
Dimensions, mm (W, H, D)	102 x 210 x 60
Design standard	EN 60730-2-7
Construction	Class 1
Control Pollution Situation	Degree 2
Rated Impulse Voltage	2.5kV
Ball Pressure Test	75°C

Specification

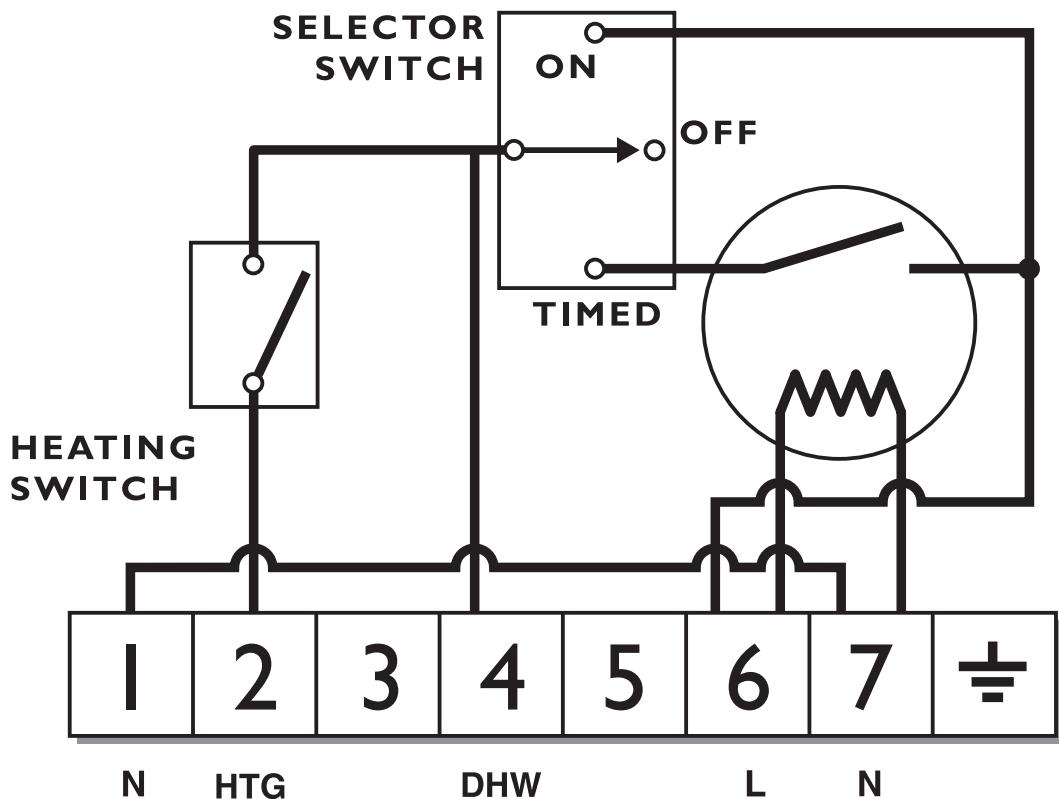
# Installation

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1. Unscrew fixings rings from selector switches, move all four tappets to top of dial and remove outer case.
2. Slacken the two screws securing the plug-in module to backplate and separate module from backplate by pulling upwards.
3. Fix backplate to wall (3 hole fixing).
4. Referring to wiring diagrams on pages 5 and 6 make electrical connections as shown (as applicable).
5. Secure cables under cable clamp.
6. Ensure all dust and debris has been cleared away from the area then plug in timeswitch module and re-tighten the 2 retaining screws - do not overtighten.
7. Remove cut out from bottom of outer case as required. Refit outer case and selector switch fixing rings. Check that outer case sits squarely on body and is not distorted by an uneven wall surface.
8. Rotate dial clockwise through at least one complete revolution and check that all four tappets are clear of outer case aperture.
9. Switch on mains, turn main selector switch to 'ON' and light boiler according to manufacturer's instructions. Operate Heating Switch to check pump/fan.
10. Turn main selector switch to 'TIMED' and rotate dial clockwise manually through at least one complete revolution to check that each tappet strikes the index wheel cleanly and operates the boiler/pump correctly according to the times set on the dial.

# Wiring

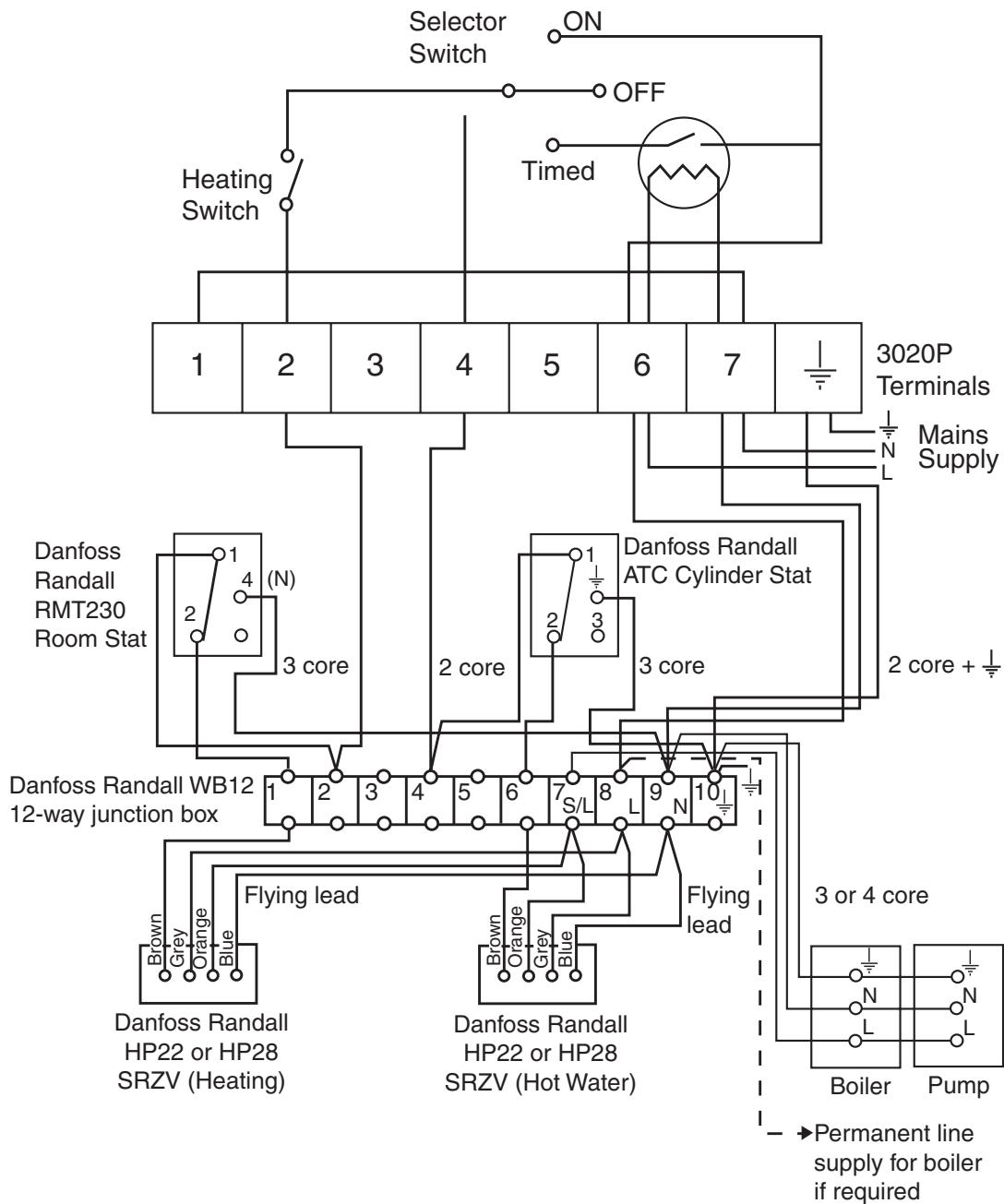
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*Terminals 3 and 5 are not internally connected to the programmer and may therefore be used as spare wiring terminals if required.*

# Wiring cont...

## Wiring



# User Instructions

## Your timeswitch

The 3020P timeswitch allows you to switch your hot water and heating on and off at times that suit you.

Four tappets on the timing dial let you decide when you want your hot water and heating to come on and go off each day. The timeswitch provides 2 ON times and 2 OFF times per day. Using two simple switches you can run the system at the set times, constantly ON or constantly OFF.

During the summer the central heating can be turned off, whilst still controlling the hot water at the set times.

## Your Timeswitch & Programming the unit

### Programming the unit

There are four TAPPETS on your timing dial, two red and two blue:

- the **red** tappets are the **ON** switches
- the **blue** tappets are the **OFF** switches

1. Hold the central black & silver knob with one hand and move the red tappet marked '**A**' **clockwise** to the time you want your HEATING/HOT WATER to switch **on** in the morning.



*NB. you may find the tappets quite stiff, so you may have to push them quite firmly to move them.*

**Programming the unit & Setting the clock**

- 2 Still holding the central knob, move the blue tappet marked 'B' to the time you want your HEATING/HOT WATER to switch **off** in the morning.
- 3 You can set your other two tappets in the same way to set your HEATING/HOT WATER for the afternoon or evening.

### **EXAMPLE**

*(NB. Clock is in 24 hour mode)*

If you want your heating and hot water ON between 7am and 10am and ON again between 5pm and 11pm, set tappets as follows:

A at 1st ON time = 7  
B at 1st OFF time = 10  
C at 2nd ON time = 17  
D at 2nd OFF time = 23

## **Setting the Clock**

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- Turn the dial **clockwise** until the correct time is lined up with the dot labelled **TIME**



*NB. clock is in 24 hour mode*



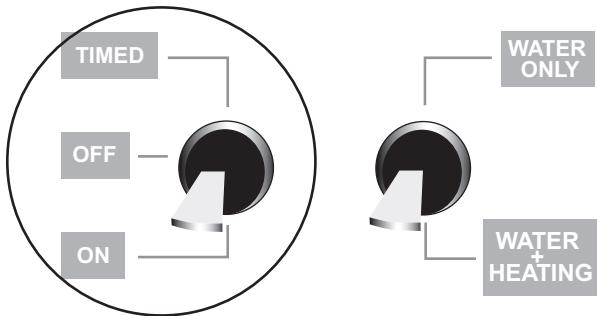
### **REMEMBER**

**You will have to reset the time after a power cut and also when the clocks change in Spring and Autumn**

# Using the Timeswitch

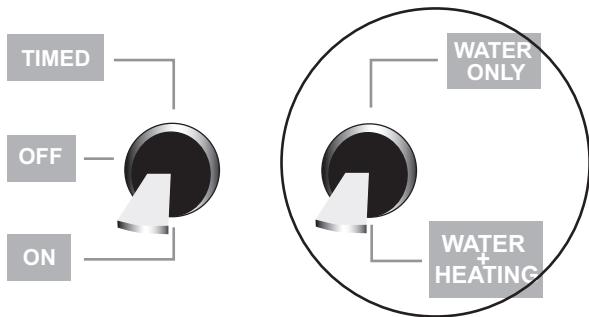
The 2 switches are used to select how the 3020P controls your hot water and heating. The heating and hot water can be operated together or the water can be controlled on its own (i.e. during the summer when only hot water is required).

## Left-hand switch



- OFF** - the system is manually switched OFF and will stay off until you change the position of the switch
- TIMED** - the system will come on and go off at the times you have programmed
- ON** - the system will come on manually and stay on constantly until you change the position of the switch

## Right-hand switch



- WATER + HEATING** - both heating and hot water are controlled according to the set programme
- WATER ONLY** - heating is turned off and only the hot water is controlled according to the set programme (for Summer use)





# Still having problems?

*Call your local heating engineer:*

Name: .....

Tel: .....

*Visit our website:*

**[www.danfoss-randall.co.uk](http://www.danfoss-randall.co.uk)**

*Email our technical department:*

**drl\_technical@danfoss.com**

*Call our technical department*

**0845 121 7505**  
*(8.45-5.15 Mon-Thurs, 8.45-4.45 Fri)*

**For a large print version of these  
instructions please contact the Marketing  
Services Department on 0845 121 7400.**



**Danfoss Randall Ltd**

Ampthill Road

Bedford

MK42 9ER

Tel: 01234 364621

Fax: 01234 219705

